

**ABSTRACT**

The invention relates to an arrangement for and a method of shaping an end face 230 of an optical fiber 26. The end face 230 is heated by a heat source 5 204, 206 in order to form a substantially hemispherical end face 230, which functions as a lens and has a predetermined radius value. An actual radius value of the end face is repetitively calculated by a control computer 6 using information from an image processing device 4, which computer 6 then compares the actual radius value with the predetermined radius value. The heating 10 of the end face is continued if the actual radius value is lower than the predetermined radius value, and discontinued if the actual radius value is equal to or higher than the predetermined radius value.

(Fig. 1)

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